IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Yasu	shi NIITSU, et al.)	
Applica	ation No.: 10/586,148)	Group Art Unit: Unassigned
Filed:	July 14, 2006)	Examiner: Unassigned
	STRESS MEASURING METHOD AND INSTRUMENT)	

Commissioner for Patents
MAIL STOP PCT

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO-1449. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

A copy of each listed foreign document is attached for the Examiner's consideration.

Applicants respectfully request that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form.

The following are listed on the accompanying PTO-1449 and are in a language other than English:

- a. JP 4-70582: The relevance of this document can be understood from the corresponding U.S. Patent No. 4,850,710, which is also attached, and the figures therein.
- b. JP 10-153500: The relevance of this document can be understood from the English language abstract attached thereto and the figures therein.
- c. G. Qin et al., "Measurement of Stresses in Silicon Wafer with Infrared Photoelastic Method": The relevance of this document can be understood from the discussion at page 6 of the present application and the figures therein.

d. Kenji Gomi et al., "Residual Stress Evaluation of GaAs Wafer by Infrared Laser

Photoelasticity": The relevance of this document can be understood from the English

language abstract attached thereto and the figures therein.

e. Kenji Gomi et al., "Influence of Crystalline Orientation on Photoelastic Property of

Si Single Crystal": The relevance of this document can be understood from the English

language abstract attached thereto and the figures therein.

This submission does not represent that a search has been made or that no better art

exists and does not constitute an admission that the listed documents are material or

constitute "prior art." If it should be determined that the listed documents do not constitute

"prior art" under United States law, Applicants reserve the right to present to the Office the

relevant facts and law regarding the appropriate status of such documents. Applicants further

reserve the right to take appropriate action to establish the patentability of the disclosed

invention over the listed documents, should the documents be applied against the claims of

the present application.

If there is any fee due in connection with the filing of this Statement, please charge the

fee to our Deposit Account No. 50-0310.

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

Robert J. Goodell, Reg. No. 41,040

Date: April 5, 2007

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INFORMATION DISCLOSURE CITATION

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PTO Form 1449

Attorney Docket No. 042715-5021	Serial No. 10/586,148	
Applicants		
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U.S. PATENT DOCUMENTS

*Examiner	Document				Sub	
Initial	Number	Date	Name	Class	Class	Filing Date
	4,850,710	July 25, 1989	Mochida et al.			Sept. 25, 1987
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		FOREIGN PA	ATENT DOCUMENTS	•			
	Document Number	Date	Country	Class	Sub Class	Translation YES NO	
	4-70582- BJ	Nov. 11, 1992	Japan				Х
	2713190-BJ	Oct. 31, 1997	Japan			Х	
	10-153500-A	June 9, 1998	Japan			Abstract	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
S.R. Lederhandler, "Infrared Studies of Birefringence in Silicon," <i>Journal of Applied Physics</i> , Vol. 30, No. 11, November 1959, pp. 1631-1638.
Kazuhiro Date, "Stress Measurement with High Sensitivity in Wafer Using Infrared Photoelasticity," Advances in Electronic Packaging, Vol. 2, 1992, pp. 985-989.
R.O. DeNicola et al., "Effect of Growth Parameters on the Residual Stress and Dislocation Density of Czochralski-Grown Silicon Crystals," <i>Journal of Applied Physics</i> , Vol. 42, No. 11, October 1971, pp. 4262-4270.
P. Dobrilla et al., "Optical Mapping of Residual Stress in Czochralski Grown GaAs," <i>Applied Physics Letters</i> , Vol. 48, No. 19, May 12, 1986, pp. 1303-1305.
G. Qin et al., "Measurement of Stresses in Silicon Wafer with Infrared Photoelastic Method," Chin. J. Infrared and Millimeter Waves, Vol. 7, No. 2, 1987, pp. 139-144.
M. Yamada et al., "Quantitative Photoelastic Characterization of Residual Strain and its Correlation with Dislocation Density Profile in Semi-insulating LEC-grown GaAs Wafers," <i>Proc. 7th Conf. on Semi-insulating III-V Materials, Ixtapa, Mexico</i> , 1992, pp. 201-210.

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Applicants Yasushi NIITSU, et al.		
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U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS							
	Document Number	Date	Country	Class	Sub Class	Trans	slation NO
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
R.D. Clayton et al., "Scanning Birefringence Mapping of Semi-insulating GaAs Wafers," <i>Proc. 7th Conf. on Semi-insulating III-V Materials, Ixtapa, Mexico</i> , 1992, pp. 211-216.
Masayoshi Yamada, "High-sensitivity Computer-controlled Infrared Polariscope" Review of Scientific Instruments, Vol. 64, No. 7, July 1993, pp. 1815-1821.
Hancheng Liang et al., "A New Method of Determining the Stress State in Microelectronic Materials," Measurement Science and Technology, Vol. 7, 1996, pp. 102-105.
Kenji Gomi et al., "The Influence of Crystalline Orientation on the Photoelastic Property of {100} Gallium Arsenide Wafer," <i>JSME International Journal</i> , Series A, Vol. 41, No. 2, 1998, pp. 274-279.
Kenji Gomi et al., "Residual Stress Evaluation of GaAs Wafer by Infrared Laser Photoelasticity," No. 98-1332, pp. 2143-2148.
Kenji Gomi et al., "Influence of Crystalline Orientation on Photoelastic Property of Si Single Crystal," No. 96-0641, pp. 2651-2656.

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